

DYLAN RYLEE DIZON

Calgary, AB | +1 (403) 978-6536 | ✉ dylan.dizon@ucalgary.ca | in linkedin.com/in/dylandizon | github.com/dylanrylee

EDUCATION

Bachelor of Science, Computer Science

Sep. 2023 - Apr. 2027

University of Calgary — Coop Program (GPA: 3.61 / 4.00)

Calgary, AB

- Transferred after first-year CS coursework from Mount Royal University (Sep. 2022 - June. 2023).
- **Coursework:** Data Structures, Algorithms, Software Engineering, Artificial Intelligence, Databases, Computer Networks, Full-Stack Development, Computer Architecture, Intro to Cybersecurity.

EXPERIENCE

Computer Vision / Machine Learning Intern

June 2025 - Present

Advanced UAV Tech Inc.

Calgary, AB

- Collaborating in a 3-person Agile team to design and train custom CNNs and fine-tune pre-trained models (e.g., DeepLabV3+, ResNet) using TensorFlow/Keras and PyTorch for crop boundary detection.
- Led the model architecture and spearheaded preprocessing pipelines with OpenCV, NumPy, Pandas, and SciPy to handle geometric corrections, normalization, and weed vs non-weed classification from 500+ aerial TIFF images.
- Conducting hyperparameter tuning (grid/random search on 20+ configs), improving boundary accuracy by 13%.
- Streamlined setup across projects using Docker for containerization and Google Colab for cloud-based development, integrating QGIS for geospatial preprocessing, and reducing onboarding time by 80%.

Software Developer Volunteer

Dec. 2024 - Apr. 2025

Affordable Laser Care

Calgary, AB (Remote)

- Built and hosted a responsive website for a laser care clinic via React, JavaScript, HTML5, CSS3, and Hostinger.
- Collaborated with the business owner in Agile-style check-ins, improving UI design and user experience.

PROJECTS

OmniQuest - Fitness App 📱 | Java, Spring Boot, React Native, TypeScript, MongoDB, Gemini API

- Developing a mobile fitness app that uses Gemini to generate/save personalized workout plans based on user goals.
- Designed a modular MVC backend with JWT auth, MongoDB, Maven, and Lombok to streamline development.
- Reduced boilerplate by 40% and improved maintainability using OOP structure and service/controller separation.

MuseoTrack - Museums/Artifacts Website 🌐 | Python, Django, React, JavaScript, MySQL

- Led a 3-member Agile team using React and Django to develop a full-stack web app with multi-role support.
- Developed 30+ SQL-based RESTful backend endpoints with JWT-secured CRUD access across user roles.
- Designed the MySQL schema and architecture with EER, RM, DFD, and HIPO diagrams to model 8+ entities.
- Utilized Postman to test and validate all backend endpoints, catching and resolving 20+ integration bugs.

X-ray Pneumonia Detector 📱 | Python, TensorFlow/Keras, Scikit-Learn, Grad-CAM

- Designed and trained a CNN with BatchNorm, Dropout, and LR scheduling, achieving 90%+ test accuracy.
- Integrated Grad-CAM to visualize key diagnostic regions, enhancing model interpretability for end users.
- Deployed a Streamlit web app for real-time X-ray upload, live predictions, and confidence scoring.

3D Urban Dashboard 🌐 | Python, Flask, React, JavaScript, Gemini API, Vercel, SQLite, Postman

- Developed a 3d dashboard using Three.js to enable users to explore NYC buildings with block-level accuracy.
- Streamlined geospatial data delivery by designing a RESTful API, resulting in structured access to filtered data.
- Enabled intuitive exploration using Gemini API for natural language queries, improving user interactivity.
- Ensured smooth deployment by setting up CI/CD with Vercel, enabling a fully automated release pipeline.

TECHNICAL SKILLS

Languages: Python, Java, C#, JavaScript, TypeScript, HTML5, CSS3, C/C++, R.

Frameworks: Django, Spring Boot, .NET, React, React Native, Tailwind, MySQL, MongoDB, Firebase.

Libraries: TensorFlow/Keras, OpenCV, Pandas, PyTorch, NumPy, SciPy, Matplotlib, YOLOv8, Gemini API.

DevOps: Docker, AWS, Colab, Git/GitHub/GitHub Actions, Maven, JUnit, Selenium, Postman, Unix, Bash, Nmap.

Concepts: OOP, MVC, REST APIs, CI/CD, UML, Design Patterns, Unit Testing, Agile/Scrum, TCP/UDP.